

Art Unit: 2862

Claims 1- 9 canceled.

10. (Currently Amended) An ejection device comprising:

a nozzle plate comprising a silicon substrate having a first surface and a second surface;

a plurality of first nozzle portions each having a circular cross-section, each of the first nozzle portions formed in the silicon substrate;

a plurality of second nozzle portions each having a circular cross-section, each of the second nozzle portions formed on the second surface of the silicon substrate, and communicating with a corresponding first nozzle portion, the circular cross-section of each of the first nozzle portions being smaller than the circular cross-section of each of the second nozzle portions, the first and second nozzle portions forming nozzles each having a cross-section smaller stepwise from a rear end toward a front end of each nozzle; and

a recess formed on the first surface of the silicon substrate, the recess having a flat bottom surface commonly communicating with the plurality of first nozzle portions such that the front end of each of the nozzles is exposed to the recess; and

wherein the plurality of first and second nozzle portions are formed by applying dry-etching by plasma discharge to the second surface of the silicon substrate, and the recess is formed by applying wet-anisotropic-etching to the first surface of the silicon substrate.

11. (Cancelled)

12. (Currently Amended) An ejection device according to claim 11, wherein the plurality of first and second nozzle portions are formed by patterning a stepwise exposed portion on a resist film formed on the second surface of the silicon substrate and applying dry-etching by plasma discharge to the stepwise exposed portion.

13. - 17. (Cancelled)

18. (Currently Amended) An inkjet head comprising:

a nozzle plate comprising a silicon substrate having a first surface and a second surface;

BEST AVAILABLE COPY

a plurality of first nozzle portions each having a circular cross-section, each of the first nozzle portions formed in the silicon substrate;

a plurality of second nozzle portions each having a circular cross-section, each of the second nozzle portions formed on the second surface of the silicon substrate, and communicating with a corresponding first nozzle portion, the circular cross-section of each of the first nozzle portions being smaller than the circular cross-section of each of the second nozzle portions, the first and second nozzle portions forming nozzles each having a cross-section smaller stepwise from a rear end toward a front end of each nozzle;

a recess formed on the first surface of the silicon substrate, the recess having a flat bottom surface commonly communicating with the plurality of first nozzle portions such that the front end of each of the nozzles is exposed to the recess; and

a second substrate including ink passages, the second substrate being bonded to the second surface of the silicon substrate such that each ink passage communicates with a rear end of a corresponding one of the nozzles; and

wherein the first nozzle portions and the second nozzle portions are formed by applying dry-etching by plasma discharge to the second surface of the silicon substrate, and the recess is formed by applying wet anisotropic etching to the first surface of the silicon substrate.

19. (Cancelled)

20. (Currently Amended) An inkjet head according to claim ~~10~~18, wherein the first and second nozzle portions are formed by patterning a stepwise exposed portion on a resist film formed on the second surface of the silicon substrate and applying dry-etching by plasma discharge to the stepwise exposed portion.

21. (Currently Amended) An inkjet head according to claim 18, further comprising;

a plurality of pressure generators each corresponding to an ink passage;

a plurality of terminal portions that each supply a control signal to a corresponding pressure generator; and

a through-hole formed ~~oain~~ in the silicon substrate that exposes the terminal portions.